

COMBINATIONS IN LYCOPERSICON (SOLANACEAE)

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LYCOPERSICON PENNELLII (Correll) D'Arcy, comb. nov.

Solanum pennellii Correll, Madrono 14: 233, fig. 1 (B). 1958

TYPE: Peru, Lima, Quive, 800-1000 m, Pennell 14304 (PH).

LYCOPERSICON PENNELLII var PUBERULUM (Correll) D'Arcy, comb.

nov. Solanum pennellii var puberulum Correll, Wrightia 2:
197. 1961.

TYPE: Peru, Ica, between Nazca and Palpa, 500-600 m,
Ferreya 14028, not seen.

This species was used to typify Solanum sect. Neolycopersicon Correll, Potato & Wild Rel. 39. 1962., and that section should now be known as Lycopersicon sect. Neolycopersicon.

This species differs conspicuously from other members of Lycopersicon in having anthers with terminal pores, a character which hitherto has been used to diagnose Lycopersicon as distinct from Solanum. However, increasing evidence justifies its consideration as a solid member of Lycopersicon and not of Solanum, even though it has been artificially placed in that group. Evidence from crossing relationships, isoenzyme data, (Rick 1979) and chloroplast DNA (Palmer & Zamir 1982) support its placement in Lycopersicon.

Judging from this data, it seems unlikely that Lycopersicon pennellii is a direct connecting link between Solanum and Lycopersicon, even though it expresses a number of characters which appear to bridge the two groups.

The argument as to whether Lycopersicon as a whole should be considered part of Solanum as was the practice a few generations ago has been answered by Rick (1976), and most workers familiar with a broad range elements in both groups consider Lycopersicon to be a distinct genus.

Palmer, J. D. & D. Zamir 1982. Chloroplast DNA evolution and phylogenetic relationships in Lycopersicon. Proc. Nat. Acad. Sci. (in press).

Rick, C.M. 1979. Biosystematic studies in Lycopersicon and closely related Solanum species. pp. 667-677 in J. G. Hawkes et al. The Biology and taxonomy of the Solanaceae. Academic Press, London.